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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,251	12/09/2003	Sharon M. Simpson	85733JLT	4728

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EXAMINER

CHEA, THORL

ART UNIT

PAPER NUMBER

1752

DATE MAILED: 02/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/731,251	Applicant(s) SIMPSON ET AL.	
	Examiner Thorl Chea	Art Unit 1752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) 24-49 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-49 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12092003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-23, drawn to an article, classified in class 430, subclass 619.
- II. Claims 24-49, drawn to a process, classified in class 430, subclass 569.

The inventions are distinct, each from the other because of the following reasons:

Inventions Group I and Group II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). The invention of group II are related to the process of making a photographic emulsion wherein the invention of Group I is related to an article that does not require the process of making the emulsion in Group II.

2. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

3. During a telephone conversation with Mr. Lanny J. Tucker on February 3, 2005 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-23. Affirmation of this election must be made by applicant in replying to this Office action. Claims 24-49 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim

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remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-12, 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Simpson et al (US Patent No. 6,423,481) and Riester et al (US Patent No. 3,895,951).

The Simpson et al disclose a photothermographic material substantially as claimed. See columns 63-64, claims 1-72 wherein the material contains photosensitive silver halide, non-photosensitive source of silver ion, hydrophobic binder, reducing composition for reducible silver ions and the photosensitive silver halide grains have been chemically sensitized with a combination of sulfur or tellurium-containing compound, and a gold (III)-containing compound of the present claimed invention. See also the sulfur-containing compound containing a thiohydantoin, rhodanine or 2-thio-4-oxo-oxazolidine nucleus in column 66, claim 14 and column 32, lines 24-65 to column 33-34, compounds S-Vii-2 to S-IX-1. Riester a phosphine sulfide to increase and stabilize the sensitivity of silver halide emulsion that spectrally sensitizes with a merocyanine dye. See the compounds in column 1, lines 55-60, the description of the substituents associated therewith especially the group such as -NH-CO- in column 2, lines 40-45, exemplified

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compound in columns 3-10, especially the compound of formula 7 which is within the scope of the claimed compound.

Simpson discloses the photothermographic material having silver halide grains chemically sensitized with a merocyanine dye, but fails to disclose a use a diphenylphosphine sulfides associated therewith. However, it has been known in Riester to use the phosphine sulfides to increase and stabilize the sensitivity of silver halide emulsion that spectrally sensitizes with a merocyanine dye. Therefore, it would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the phosphine sulfides compound taught in Riester et al to increase and stabilize the silver halide grains taught in Simpson et al, and thereby provide a material as claimed.

7. Claims 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Simpson et al (US Patent No. 6,423,481) and Riester et al (US Patent No. 3,895,951) as applied to claims 1-12 above, and further in view of Simpson et al (US Patent No. 6,440,649). Simpson et al ('649) discloses a use of a phosphor to increase image sensitivity and image contrast of a photothermographic material. See columns 47-50, claims 1-18 which discloses the phosphor compound claimed in the present claimed invention. It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the phosphor compound taught in the '649 patent to increase image sensitivity and image contrast of a photothermographic material taught by the combination of Simpson et al (US Patent No. 6,423,482) and Riester et al (US Patent No. 3,895,951), and thereby provide a material as claimed.

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8. Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Simpson et al (US Patent No. 6,440,649), Simpson et al (US Patent No. 6,423,481) and Riester et al (US Patent No. 3,895,951).

Simpson et al ('649) discloses a photothermographic material substantially as claimed. See the photothermographic material in columns 48-50, claims 1-17 wherein the material comprising a support having on one side of the support thereof, a photothermographic layer having dry coating weight of about 5 to about 200 mg/m², a photosensitive silver halide, a non-photosensitive source of reducible silver ions, a reducing agent for the reducible silver ions, and a phosphor that is sensitive to X-radiation and is present in an amount from about 0.1 to 20 mole/mole of silver; the total silver present in the material is at least 0.02 mol/ m², and the phosphor is YTaO₄, YTaO₄:Nb, Y(Sr) TaO₄, and Y(Sr) TaO₄:Nb.. In column 48, claims 14, it is discloses the silver halide grains that has been sensitized with a sulfur-containing chemical sensitizing compound, a tellurium-containing chemical sensitizing compound, or a gold(III)-containing chemical sensitizing compound, or mixture of any of these chemical sensitizing agent, and use of at least silver bromide or silver iodobromide is disclosed in column 49, claim 18. See also columns 32 wherein the chemical sensitizer such as merocyanine dye as sulfur containing compound.

9. Simpson et al ('481) discloses the gold(III)-containing chemical sensitizing compound of the claimed invention in column 64, claims 6 and Table 1 in columns 13-16. Riester a phosphine sulfide to increase and stabilize the sensitivity of silver halide emulsion that spectrally sensitizes with a merocyanine dye. See the compounds in column 1, lines 55-60, the description of the substituents associated therewith especially

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the group such as -NH-CO- in column 2, lines 40-45, exemplified compound in columns 3-10, especially the compound of formula 7 which is within the scope of the claimed compound. Simpson et al ('469) discloses the photothermographic material substantially as claimed, but fails to disclose a use a diphenylphosphine sulfides associated therewith. However, it has been known in Riester to use the phosphine sulfides to increase and stabilize the sensitivity of silver halide emulsion that spectrally sensitizes with a merocyanine dye. Therefore, it would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the phosphine sulfides compound taught in Riester et al to increase and stabilize the silver halide grains taught in Simpson et al, and thereby provide a material as claimed. The ratio of gold compound to diphenylphosphine sulfide presented therein would have been found prima facie obvious since the can be achieved routine process of optimizing the sensitivity of the silver halide grains.

Double Patenting

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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11. Claims 1-12, 21-23 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-7, 26 of U.S. Patent No. 6,423,481 in view of Reister et al (US Patent No. 3,895,951). The invention claimed in the '481 patent differs from that of the present claimed invention in the use of a sulfur-containing compound that is a diphenylphosphine sulfide compound that has been known in Riester et al to use the phosphine sulfides to increase and stabilize the sensitivity of silver halide emulsion that spectrally sensitizes with a merocyanine dye. Therefore, it would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the phosphine sulfides compound taught in Riester et al to increase and stabilize the silver halide grains claimed in Simpson et al, and thereby provide a material as claimed.

12. Claims 13-18 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-7, 26 of U.S. Patent No. 6,423,481 in view of Reister et al (US Patent No. 3,895,951) further in view of Simpson et al (US Patent No. 6,440,649). Simpson et al discloses the use of phosphor to increase image sensitivity and image contrast of a photothermographic material. See Simpson in columns 17-18. It would have been obvious the worker of ordinary skill in the art to include the phosphor in the invention claimed in '481 patent to increase its image contrast, and thereby provide the claimed invention.

13. Claims 19-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-18 of U.S. Patent No. 6,440,649 in view of Reister et al (US Patent No. 3,895,951) and U.S. Patent No. 6,423,481. The invention claims in the '649 differs from that claimed in the present

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claimed invention in the use of a sulfur-containing compound that is a diphenylphosphine sulfide compound that has been known in Riester et al to use the phosphine sulfides to increase and stabilize the sensitivity of silver halide emulsion that spectrally sensitizes with a merocyanine dye. Therefore, it would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the phosphine sulfides compound taught in Riester et al to increase and stabilize the silver halide grains claimed in the '649, and thereby provide a material as claimed. The gold structure compound has been known in the '481 patent in column 63-64, claims 1-6. The ratio of gold compound to diphenylphosphine sulfide presented therein would have been found prima facie obvious since the can be achieved routine process of optimizing the sensitivity of the silver halide grains.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thorl Chea whose telephone number is (571) 272-1328. The examiner can normally be reached on 9 AM-5:30 PM.

16. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H Kelly can be reached on (571)272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tchea *tin*
February 3, 2005

Thorl Chea
Primary Examiner
Art Unit 1752

Thorl Chea